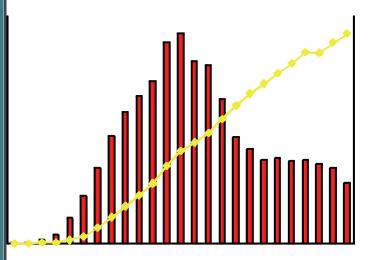
HIV/AIDS Epidemiology Report

2012



COUNTY OF SAN DIEGO

HEALTH AND HUMAN SERVICES AGENCY



County of San Diego Health and Human Services Agency Division of Public Health Services

Epidemiology and Immunization Services Branch

HIV/AIDS Surveillance Program Epidemiology Report 2012

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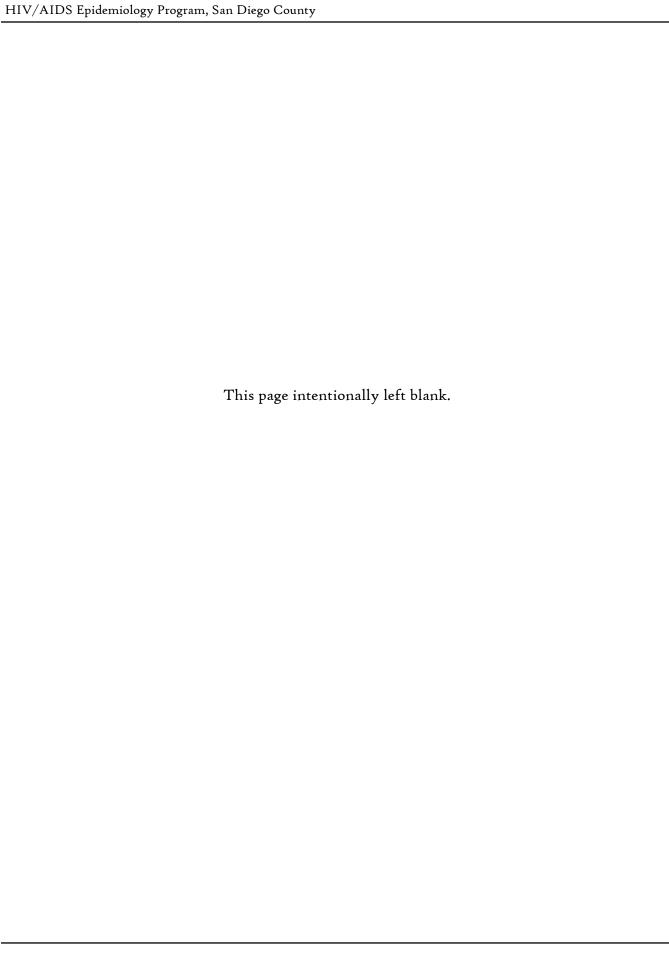
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I. EXECUTIVE SUMMARY

California has the second largest number of Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) cases in the United States; San Diego county has the third largest number of HIV and AIDS cases in California.

This report includes those AIDS cases diagnosed in San Diego county from the first cases in 1981 through December 31, 2011. It also includes HIV cases diagnosed from April 17, 2006 through December 31, 2011 (see section on HIV Cases below).

AIDS Cases

Since the 1981 beginning of the epidemic, 14,805 AIDS cases have been reported in San Diego county, as of December 31, 2011. Advances in medication and medical treatment have enabled individuals with AIDS to live longer, healthier lives. As the number of individuals newly diagnosed with AIDS has been decreasing, the number of individuals living with an AIDS diagnosis continues to increase. Of the individuals diagnosed with AIDS in San Diego county, 7,221 are currently alive (see Table 2).

Cumulative AIDS cases (1981-2011) in San Diego county differ from those seen in the United States: the proportion of female cases in the county is less than half that seen in the US (see Table 1), there is a smaller proportion of black cases, and there is a greater proportion of Men who have Sex with Men (MSM) transmission. In the county, the number of new cases has been decreasing each year since 1993, but the decrease has slowed and has been relatively stable

since 2006 at about 350 cases per year (see Figure 1). Although only 251 cases were reported in 2011, it is anticipated that cases diagnosed in 2011 will continue to be reported in 2012 due to delays in reporting.

Individuals diagnosed with AIDS in San Diego county are most commonly white, male, aged 30 to 39 years (see Figure 2 and Table 3), and have male sex partners. Over the course of the epidemic there have been slow increases in the proportion of cases in blacks, Hispanics, women, people aged 40 or older, and those having used injected drugs. In recent years (2007-2011) however, these proportions have been more stable (see Table 4 and Table 6).

The decrease in the annual number of AIDS diagnoses has not been uniform across racial/ethnic groups. The largest decrease has been in whites; the proportion of persons of color (see Figure 3), including blacks and Hispanics, has increased over time (see Figure 3). Persons of color have comprised the majority of new cases since 2000, with only slower increases since that time.

Blacks have had the third largest number of cases per year, but the highest rate of AIDS (see Figure 4). The annual AIDS case rate among blacks is almost three times that seen in whites (see Table 4). Hispanics have the second highest number of cases per year and a rate that is about one third higher than that seen in whites, but about half of that recently seen in blacks. From 2005 to 2010, there have been only modest reductions in rates across races/ethnicities (see Figure 4). Caution is required in interpreting rates calculated for 2011 as more cases diagnosed 2011 are expected to be reported in 2012, making the 2011 rates appear artificially low.

The average age at time of AIDS diagnosis has been slowly increasing over the years across all racial/ethnic groups (see Table 5). From 2006 to 2010, the average age at the time of diagnosis was 40 years of age with whites slightly older (44 years of age). This increase in age may be due to later age at infection, effective medications, and/or adherence to medication regimens which allow an individual infected with HIV to be healthy for a longer time before he or she meets the case definition for AIDS.

The majority of AIDS cases were living in the Health and Human Services Agency (HHSA) Central Region at the time of diagnosis. However, since 1987 the percent of cases in the Central Region has declined while it has doubled in the South Region, and remained stable in other regions (see Table 7). The majority of cumulative cases diagnosed in the Central Region were in whites (62%), followed by Hispanics (20%), and blacks (15%) (see Table 8). In recent years, the proportion has declined in whites (47%) and increased in Hispanics (32%) and blacks (18%) (see Table 10). The South Region has been the second most frequent area of residence at time of diagnosis since 1997 (see Table 7). cumulative cases diagnosed in the South region are predominantly Hispanic (63%) with smaller proportion of whites (25%) and blacks (10%) (see Table 8). The Central and North Central Regions have had the smallest percent of female cases over time, while in the other regions, 11-16% of cases are female (see Table 9). It should be noted that only the area of residence at the time of diagnosis is known. It is probable that some cases have moved since their diagnosis, both within the county and out of the county.

For men, the predominant mode of trasmission in recent years is MSM (75%), followed by MSM who Inject Drugs (MSM+IDU) (10%) (see Table 11 and Figure 5). Over time, heterosexual contact and Injection Drug Use (IDU) have become somewhat more frequent modes of transmission in men, but MSM remains the primary risk for transmission. Differences are seen in male cases across races/ethnicities, with blacks having a significantly greater proportion of IDU and lower proportion of MSM than either whites or Hispanics (see Table 12).

In women, heterosexual contact (69%) is the primary mode of transmission in recent years, followed by IDU (22%) (see Table 11 and Figure 6). Over the years, heterosexual contact has been increasing in frequency while IDU generally has been decreasing (see Table 11). Sexual partners of known HIV positive males account for 46% of female AIDS cases, while IDU partners account for 10% and MSM partners account for 13% (see Figure 6). It should be noted that the known HIV positive partners of female AIDS cases may be IDU, MSM, or have other risks for the acquisition of their own infection and may not disclose these risks to their female partners.

In recent years, a greater proportion of cases had less than 12 months between reported HIV infection and AIDS compared to previous time periods (see Figure 8). Whites (46%) and blacks (47%) have similar proportions of cases with less than a year between HIV and AIDS diagnosis, but Hispanics (62%) have a significantly greater proportion with less than twelve months between diagnoses. The proportion of Hispanics with less than 12 months between HIV and AIDS diagnosis increased significantly over the 1990s

but has been more stable in recent years. The large proportion of cases with less than 12 months between diagnoses may be due to delayed HIV testing or in delayed care-seeking after HIV testing and diagnosis, or both.

HIV Cases

In California, 43,501 cases of HIV (not AIDS) were reported by name through June 2011. Names-based reporting began April 17, 2006. Prior to April 17, 2006, HIV cases were reported by non-name code and these non-name code cases are no longer counted in the State or local statistics. Almost 68% of the non-name code cases have been re-entered into the data system with a name, or re-ascertained. Efforts continue to reascertain these cases, but it may not be possible for all of them. The HIV data presented here is inclusive of the period April 17, 2006 through December 31, 2011, for a total of 4,910 HIV case reports. In general, the distribution of demographic variables for those HIV cases reported was similar to that of cumulative AIDS cases in San Diego county.

New in this report are in-depth analyses of HIV cases, including examination of time periods and calculation of rates. Please use caution in interpreting trends over time since this surveillance system is relatively new and because, as a case progresses to AIDS, it is removed from the HIV statistics. In 2006, for example, over 300 cases had an HIV diagnosis that year but are not included in the HIV data presented here because they have had an AIDS diagnosis since then. In addition, reported cases of HIV may not be representative of all those living with HIV (non-AIDS) in San Diego county since it is dependent on testing prac-

tices, access to health care and other factors. For this reason, the number of reported HIV cases may be considered a lower limit.

The most frequent HIV case demographics for males (n=4,436) were white race, 30-39 age group, and the Central region as residence at diagnosis (see Table 18, Figure 11, and Table 20). Women represented 10% of all HIV cases (n=474) and the most frequent demographics were white or Hispanic (same proportion), 30-39 age group and the Central region as the residence at diagnosis. For both genders, the most frequent risk factor for HIV transmission was having a male sexual partner.

The distribution of HIV cases by gender was different for San Diego and California, when compared to the United States (see Table 18). A smaller proportion of female HIV cases have been reported in San Diego (10%) and California (13%) than in the United States (23%). However the distribution by gender in San Diego county is similar for HIV (90% male; 10% female) and more recent AIDS cases (90% male; 10% female).

The number of cases diagnosed each year increased through 2009 (see Figure 10). This is likely a reflection of the progression of HIV to AIDS and a fairly new reporting system. The number of cases diagnosed in 2011 (262) are expected to increase over the next year due to delays in reporting. HIV case reports per year have dropped from a peak that occurred just after the initiation of confidential names-based reporting to about 500 per year.

Similar to AIDS cases (see Figure 3), the proportion of persons of color (see Figure 12) has increased over time among HIV cases. Black cases have the highest rate of HIV, with Hispanic and

white following. Not including 2011, due to delays in reporting, the rate of HIV has decreased significantly only in whites since 2007. (see Table 20 and Figure 13). The rates have not significantly changed in Hispanics and blacks over the same time period.

The average age at HIV diagnosis is 34 for cumulative data, although it has increased over time from 33 to 35 (see Table 21). HIV cases are younger at diagnosis than AIDS cases; however, both share a similar trend with increaseing proportion of cases in the 40-49 age group in recent time periods (see Figure 11). Hispanics and blacks have a slightly younger age at diagnosis than whites in all time periods (see Table 21).

Fifty-seven percent of cumulative HIV cases were diagnosed in the Central Region (see Table 23). Over time, fewer cases have been diagnosed in the Central Region and more in the South region. Racial/ethnic proportions of HIV cases vary considerably by region: 60% of cases diagnosed in Central Region are white, while 61% are Hispanic in the South Region (see Table 24). While the proportion of female cases in the Central and East Regions have remained stable, this proportion has generally decreased in other regions (see Table 25). In addition, over time all regions except the East have had increases in the percent of cases that are Hispanic, and all but the Central and North Coastal have had increases in the percent of cases that are black (see Table 26).

Mode of transmission varies by gender and race/ethnicity. The mode of transmission in most cumulative adult male HIV cases is MSM (83%), while most adult female cases (72%) reported heterosexual contact as mode of transmission (see Figure 14 and 15). These proportions have re-

mained essentially the same in a more recent time period. Compared to other racial/ethnic groups, black cases had a smaller proportion of MSM and greater proportion of heterosexual contact (see Table 28). Very few cases are pediatric and the proportion has decreased over time, particularly for female cases (see Table 27). Since 2002, the proportion of male MSM and MSM+IDU cases has decreased slightly among all racial/ethnic groups while increasing slightly for heterosexual contact and IDU (except white for heterosexual contact; see Table 28). For female HIV cases, the changes since 2002 have been a decrease in IDU (except for Hispanic); there was also a slight decrease in heterosexual contact for black and Hispanic cases, with an increase for white cases (see Table 29). However, the number of cases in each time period is small and should be interpreted with caution.

Additional information on Reporting and HIV/AIDS in San Diego County can be found in the *Physician's Bulletin:* HIV 2008 at:

http://www2.sdcounty.ca.gov/hhsadocumentsPhysiciansBulletin December2008.pdf

and the Physician's Bulletin: Partner Services and HIV Incidence Surveillance 2011:

http://www.sdcounty.ca.gov/hhsa/ programs/phs/documents/ HAEU_PhysiciansBulletinMarch2011.pdf

I. AIDS CASES

<u>Table 1:</u> Adult/Adolescent AIDS Diagnoses by Gender in the United States, the State of California, and San Diego County

	United S	States	California		San Diego	County	San Diego County	
	Through 12/	/31/2010*	Through 6/30/2011		Through 12/31/2011		2009-2	2011
Gender	#	%	#	%	#	%	#	%
Male	893,058	80%	145,331	91%	13,577	92%	808	91%
Female	227,249	20%	14,458	9%	1,161	8%	84	9%
Total	1,120,307	_	159,789**	·	14,738	_	892	

^{*}Most recent year available; estimate.

<u>Table 2:</u> AIDS Cases, Deaths, and Cumulative¹ Fatality Rates in San Diego County, the State of California, and the United States

San Diego County	
New cases reported 2011	213
Deaths in 2011	60
Cumulative cases	14,805
Cumulative deaths	7,584
Living Cases	7,221
Cumulative case-fatality rate ¹	51%
California ²	
Cumulative cases	160,760
Cumulative deaths	91,371
Living cases	69,389
Cumulative case-fatality rate	57%
United States ³	
Cumulative cases, estimate	1,129,127
Cumulative deaths, estimate	619,380
Living cases, estimate	509,747
Cumulative case-fatality rate	55%

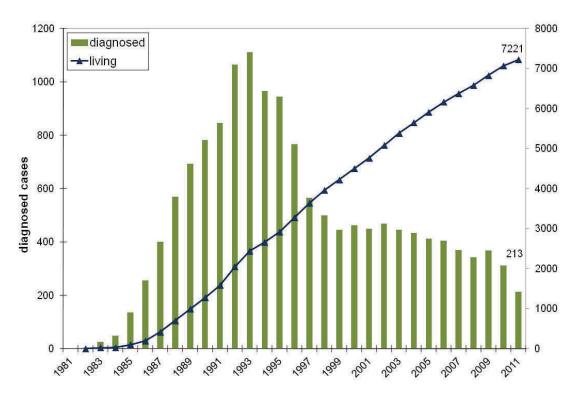
¹Cumulative case-fatality rate is calculated by dividing the estimated cumulative deaths by the cumulative cases.

^{**}Does not include 971 transgendered persons.

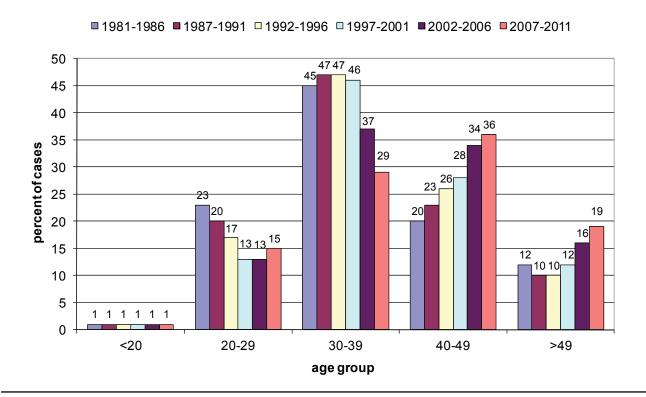
 $^{^2}$ California Office of AIDS. HIV/AIDS Surveillance in California, as of June 30, 2011.

³Centers for Disease Control and Prevention. HIV/AIDS Surveillance Report 2010, Vol.22.

Figure 1: Number of Persons Diagnosed (n=14,806) and Living (n=7,221) with AIDS, San Diego County



<u>Figure 2:</u> AIDS Cases Age Group and Time Period of Diagnosis, San Diego County

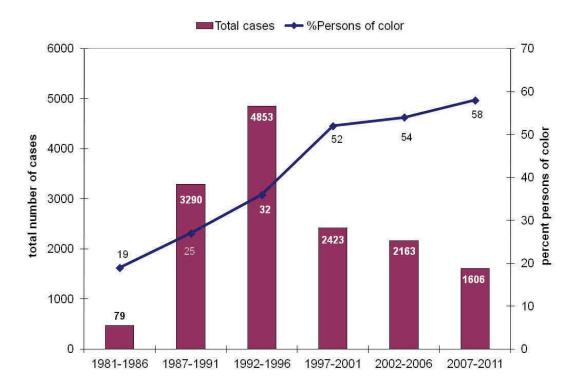


<u>Table 3:</u>
Age Group of AIDS Case at Diagnosis (Cumulative) and Current Age (2011, Living), San Diego County

Age Group,	At Diagr	nosis	In 2011*		
Years	Frequency	Percent	Frequency	Percent	
Less than 13	68	0.5%	7	0.1%	
13-19	73	0.5%	14	0.2%	
20-29	2,413	16.3%	228	3.2%	
30-39	6,391	43.2%	882	12.2%	
40-49	4,096	27.7%	2,818	39.0%	
More than 49	1,764	11.9%	3,272	45.3%	
Total	14,805	100.0%	7,221	100.0%	

^{*}Of those living in 2011.

<u>Figure 3:</u> AIDS Cases Diagnosed in Time Period and Percent of Cases in Persons of Color, San Diego County

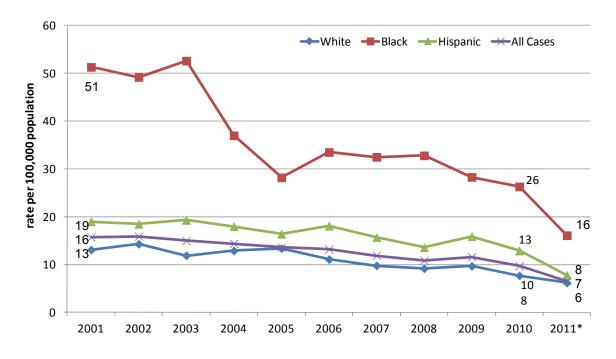


<u>Table 4:</u> AIDS Rate by Race/Ethnicity and Year of Diagnosis, San Diego County

				Yea	r of Diagn	osis		
Race/ Ethnicity		2005	2006	2007	2008	2009	2010	2011**
White	Cases	210	174	155	146	154	122	99
	% of Total	51%	43%	42%	46%	42%	39%	47%
	Rate*	13.4	11.1	9.8	9.2	9.7	7.7	6.2
Black	Cases	45	54	53	54	47	44	27
	% of Total	11%	13%	14%	16%	13%	14%	13%
	Rate*	28.2	33.5	32.5	32.8	28.3	26.3	16.1
Hispanic	Cases	144	162	143	127	153	127	77
	% of Total	35%	40%	39%	37%	42%	41%	36%
	Rate*	16.4	18.1	15.7	13.6	15.9	12.9	7.8
All Races/	Cases	413	405	370	343	368	312	213
Ethnicities#	Rate*	13.6	13.2	11.9	10.9	11.6	9.7	6.6

^{*}per 100,000 population.

Figure 4: Rate of AIDS Cases by Race/Ethnicity, 2002-2010, San Diego County



^{*}Additional cases expected to be reported.

^{**}Additional cases diagnosed in 2011 are expected to be reported in 2012.

[#]Includes Asian, Pacific Islander, Native American, and others.

<u>Table 5:</u> AIDS Cases by Age-Related Measurements and Race/Ethnicity Over 5-Year Time Periods, San Diego County

_	Age-Related		Race/Ethnic Group				
Time Period	Measure	White	Black	Hispanic	Other*	All Cases	
	mean age, years	38	34	35	33	37	
1987-1991	oldest case	88	70	75	52	88	
1907-1991	youngest case	<1 year	<1 year	<1 year	15	<1 year	
	total cases	2,410	337	483	60	3,290	
	mean age, years	39	36	35	35	37	
1992-1996	oldest case	78	69	74	69	78	
1002-1000	youngest case	<1 year	<1 year	<1 year	<1 year	<1 year	
	total cases	3,129	589	984	151	4,853	
	mean age, years	40	39	37	37	39	
1997-2001	oldest case	92	71	78	73	92	
1997-2001	youngest case	18	<1 year	<1 year	18	<1 year	
	total cases	1,175	384	786	78	2,423	
	mean age, years	42	39	38	37	40	
2002-2006	oldest case	84	69	73	65	84	
2002-2000	youngest case	4	5	<1 year	17	<1 year	
	total cases	997	318	770	78	2,163	
	mean age, years	44	39	39	40	40	
2007-2011	oldest case	77	65	83	84	84	
2001-2011	youngest case	16	1	<1 year	20	<1 year	
	total cases	676	225	627	78	1,606	

<u>Table 6:</u>
Female AIDS Cases by Race/Ethnicity Over Time, San Diego County

	1992-	1996	1997-	2001	2002-	02-2006 2007-2011			Cumu	lative*
Race/	%	total	%	total	%	total	%	total	%	total
Ethnicity	female	cases	female	cases	female	cases	female	cases	female	cases
White	5%	3,129	7%	1,175	6%	997	8%	676	5%	8,770
Black	14%	589	20%	384	17%	318	21%	225	16%	1884
Hispanic	9%	984	10%	786	15%	770	9%	627	11%	3,703
Other**	17%	151	17%	78	13%	78	9%	78	14%	448
Total	7%	4,853	10%	2,423	11%	2,163	10%	1,606	8%	14,805

Note: Percent of female cases refers to the percent of total cases in group who are female.

^{*}Includes cases from 1981-2011.

^{**}Includes Asians, Pacific Islanders, Native American, Native Alaskan, and others.

<u>Table 7:</u> AIDS Cases by HHSA Region Over Time, San Diego County

Time Period				North	North	North	Total in
of Diagnosis	Central	East	South	Coastal	Inland	Central	Time Period
1987-1991	61%	8%	7%	6%	4%	15%	3,290
1992-1996	59%	6%	8%	8%	5%	14%	4,853
1997-2001	55%	8%	14%	8%	4%	11%	2,423
2002-2006	52%	7%	18%	8%	5%	10%	2,163
2007-2011	49%	9%	18%	8%	5%	12%	1,606
Total in Region	8,366	1,068	1,635	116	684	1,863	14806*

<u>Table 8:</u>
Cumulative AIDS Cases by Race/Ethnicity and HHSA Region, San Diego County

		HHSA Region								
				North	North	North	All			
Race/Ethnicity	Central	East	South	Coastal	Inland	Central	Regions			
White	62%	63%	25%	63%	64%	72%	59%			
Black	15%	13%	10%	10%	5%	9%	13%			
Hispanic	20%	21%	63%	24%	26%	15%	25%			
Asian/PI/Other*	3%	3%	3%	4%	5%	4%	3%			
Total in Region	8,366	1,068	1,635	1,116	684	1,897	14766**			

<u>Table 9:</u>
Female AIDS Cases by HHSA Region Over Time, San Diego County

			Time			_					
	1992-	1996	1997-	2001	2002-	-2006	2007	-2011	Cumu	Cumulative#	
HHSA	%	all									
Region	female	cases*									
Central	5%	2,874	8%	1,336	9%	1,130	10%	754	6%	8,366	
East	11%	312	14%	188	14%	150	16%	138	12%	1068	
South	11%	386	11%	341	16%	393	11%	285	12%	1,635	
North	12%	390	14%	188	15%	167	12%	127	12%	1,116	
Coastal											
North	16%	237	13%	105	13%	100	11%	82	14%	684	
Inland											
North	8%	653	12%	265	7%	221	5%	186	7%	1,897	
Central											
Total	7%	4,852	10%	2,423	11%	2,161	10%	1,572	8%	14766**	

^{*}Male and female

^{*}Does not include cases from 1981-1986.

^{*}Includes Native American, Native Alaskan, and others.

^{**}Region unknown for 40 cases.

[#]Includes cases from 1981-2011.

^{**}Region not known for 40 cases.

<u>Table 10:</u>
AIDS Cases by Race/Ethnicity and HHSA Region Over Time, San Diego County

	Time		Race/E		Total in	
HHSA Region	Period	White	Black	Hispanic	Other**	Time Period
Central	1987-1991	74%	12%	13%	1%	1,996
Ceriliai	2007-2011	47%	18%	32%	3%	754
	cumulative*	62%	15%	20%	3%	8,366
East	1987-1991	78%	9%	11%	3%	254
Easi	2007-2011	51%	12%	32%	5%	138
	cumulative*	63%	13%	21%	4%	1068
South	1987-1991	42%	10%	46%	2%	214
Soulii	2007-2011	13%	10%	74%	3%	285
	cumulative*	25%	10%	63%	3%	1,635
North Coastal	1987-1991	74%	8%	15%	3%	211
NOITH COastai	2007-2011	54%	9%	32%	6%	127
	cumulative*	63%	10%	24%	4%	1116
North Inland	1987-1991	76%	4%	17%	4%	136
NOI III II II III II	2007-2011	43%	7%	40%	10%	82
	cumulative*	64%	5%	26%	5%	684
North Central	1987-1991	83%	6%	10%	2%	479
North Central	2007-2011	50%	12%	27%	10%	186
	cumulative*	72%	9%	16%	4%	1,863
	1987-1991	65%	15%	18%	2%	2,874
County-wide	2007-2011	42%	14%	39%	5%	1,606
	cumulative*	59%	13%	25%	3%	14765#

^{*1981-2011}

^{**}Includes Asian/Pacific Islander and Native American and other races/ethnicities.

[#]Region is not known for 40 cases.

Figure 5: Cumulative (n=13,613) and 2007-2011 (n=1,441) Male AIDS Cases by Mode of Transmission, San Diego County

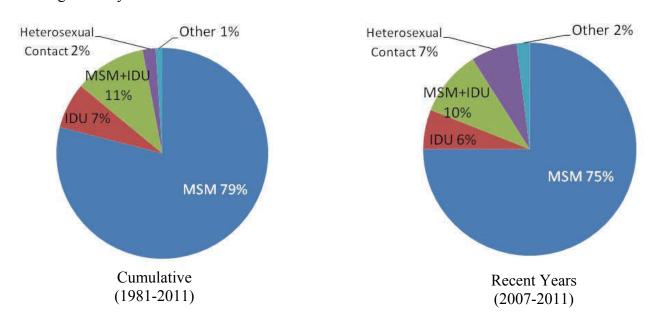
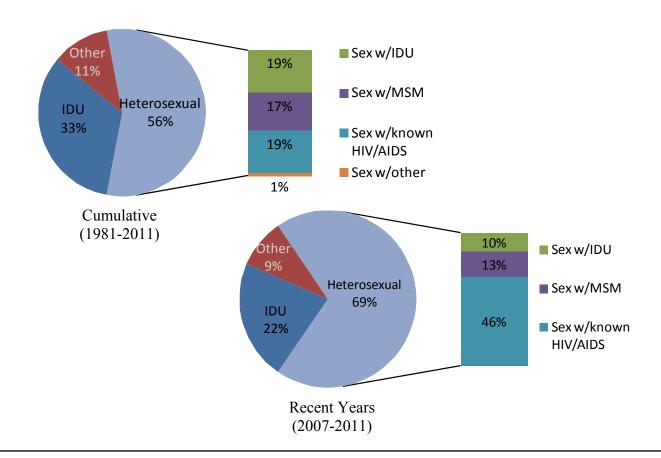


Figure 6: Cumulative (n=1,193) and 2007-2011 (n=165) Female AIDS Cases by Mode of Transmission, San Diego County



<u>Table 11:</u> AIDS Cases by Gender, Mode of Transmission and Time Period, San Diego County

e		Т	ime Per	s			
Gender		1987-	1992-	1997-	2002-	2007-	
G	Mode of Transmission	1991	1996	2001	2006	2011	Cumulative*
	Adolescent/Adult:						
	MSM	83%	80%	74%	76%	75%	79%
	IDU	5%	7%	9%	8%	6%	7%
	MSM+IDU	10%	12%	14%	11%	10%	11%
Male	Heterosexual	1%	1%	2%	5%	7%	2%
Σ	Blood Products	2%	1%	<1%	<1%	<1%	1%
	Risk not specified/other**	<1%	<1%	<1%	<1%	2%	<1%
	Pediatric (0-12 years):						
	All modes	<1%	<1%	<1%	<1%	<1%	<1%
	Number in Group	3,123	4,493	2,172	1,926	1,441	13,613
	Adolescent/Adult:						
	IDU	35%	40%	42%	22%	22%	33%
a)	Heterosexual	38%	48%	55%	75%	69%	56%
Jak	Blood products	17%	6%	0%	0%	0%	5%
Female	Risk not specified/other**	4%	3%	2%	2%	6%	3%
	Pediatric (0-12 years):						
	All modes	6%	3%	2%	1%	3%	3%
	Number in Group	167	360	251	237	165	1,193
*1001							

^{*1981-2010}

<u>Table 12:</u> Adult/Adolescent Male AIDS Cases by Mode of Transmission, Race/Ethnic Group, and Time Period, San Diego County

		F	Racial/Etl	nnic Grou	ıp		All R	acial/
	W	hite	Bla	ack	Hisp	panic	Ethnic (Groups*
	1987-	2007-	1987-	2007-	1987-	2007-	1987-	2007-
Mode of Transmission	1991	2011	1991	2011	1991	2011	1991	2011
MSM	86%	75%	64%	68%	80%	77%	83%	75%
IDU	2%	6%	17%	10%	8%	6%	5%	6%
MSM+IDU	9%	13%	15%	10%	8%	7%	10%	10%
Heterosexual	<1%	5%	2%	7%	1%	8%	1%	7%
Blood products	2%	0%	1%	1%	3%	0%	2%	<1%
Not specified/Other	1%	1%	1%	5%	1%	2%	1%	2%
Number in Group	2,330	625	297	177	441	568	3,123	1,441
								

^{**}Includes pediatric HIV cases who progress to AIDS after the age of 12.

^{*}Includes Asian, Pacific Islander, Native American and Native Alaskan.

<u>Table 13:</u>
Adult/Adolescent Female AIDS Cases by Mode of Transmission, Race/Ethnic Group, and Time Period, San Diego County

			Racial/Et	hnic Gro	ир		All F	Racial/	
	W	White		Black		Hispanic		Ethnic Groups*	
	1987-	2007-	1987-	2007-	1987-	2007-	1987-	2007-	
Mode of Transmission	1991	2011	1991	2011	1991	2011	1991	2011	
IDU	28%	35%	56%	21%	29%	14%	35%	22%	
Heterosexual	44%	61%	38%	73%	29%	71%	38%	69%	
Blood products	24%	0%	3%	0%	19%	0%	19%	0%	
Not specified/Other**	4%	4%	3%	6%	24%	15%	8%	9%	
Number in Group	80	51	40	48	42	59	167	165	

^{*}Includes Asian, Pacific Islander, Native American, and Native Alaskan.

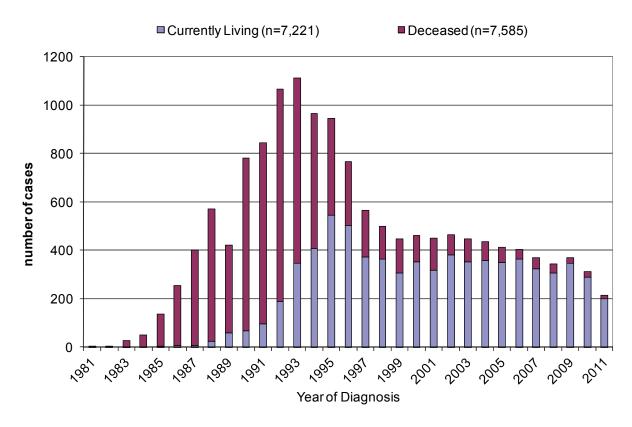
<u>Table 14:</u>
Hispanic AIDS Cases by Gender, Place of Birth, and Time Period, San Diego County

e		Tir	me Period	of Diagno	sis	
Gender		1992-	1997-	2002-	2007-	
Ğ	Place of Birth	1996	2001	2006	2011	Cumulative*
	US/US dependency born	53%	43%	27%	44%	43%
Φ	Mexico	45%	62%	70%	53%	53%
Male	Other foreign	5%	4%	3%	3%	4%
_	Unknown	0%	<1%	1%	1%	<1%
	Number in time period	895	706	655	568	3,315
	US/US dependency born	45%	33%	25%	41%	36%
<u>e</u>	Mexico	46%	61%	70%	56%	57%
Female	Other foreign	9%	6%	9%	2%	6%
F	Unknown	0%	0%	1%	2%	1%
	Number in time period	89	80	115	59	388

^{*}Includes cases from 1981-2011.

^{**}Includes maternal transmission.

Figure 7:
AIDS Cases by Year of Diagnosis and Vital Status, San Diego County



<u>Table 15:</u>
Proportion of Cases Diagnosed in 2002-2006 Surviving Greater than 12, 24, and 36 Months by Race/ Ethnicity in the US (CDC Data) and San Diego County

		Survival in Months							
	>12			>24	>36				
Race/		County of		County of		County of			
Ethnicity	CDC	San Diego	CDC	San Diego	CDC	San Diego			
White	0.89	0.92	0.86	0.88	0.84	0.87			
Black	0.88	0.92	0.84	0.89	0.81	0.86			
Hispanic	0.89	0.92	0.87	0.91	0.85	0.90			
All Cases*	0.89	0.92	0.85	0.89	0.82	0.88			

^{*}Includes Asian, Pacific Islander, Native American, and Native Alaskan.

Table 16:

Percent of HIV Cases Diagnosed in 2009 Progressing from HIV to AIDS in Less than 12, and at Least 12 Months (includes those who have not progressed to AIDS) by Race/Ethnicity in the US (CDC Data) and San Diego County

	Time	to AIDS diagnos	sis after HIV	diagnosis
	12+ months		<12 n	nonths#
Race/		County of		County of
Ethnicity	CDC*	San Diego	CDC*	San Diego
White	68%	73%	32%	27%
Black	69%	72%	31%	28%
Hispanic	63%	59%	37%	41%
All Cases**	67%	68%	33%	32%

^{**}Includes Asian, Pacific Islander, Native American, Native Alaskan #Includes those who have not yet developed AIDS.

Figure 8:
Percent of AIDS Cases Progressing to AIDS in Less than 12 Months of HIV Diagnosis by Race/Ethnicity and 5-Year Time Period, San Diego County

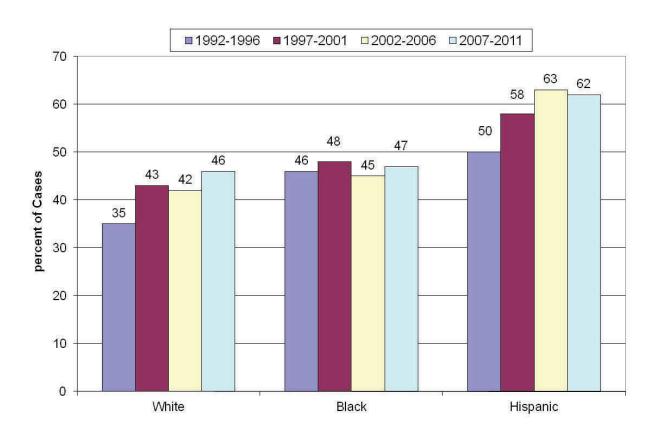
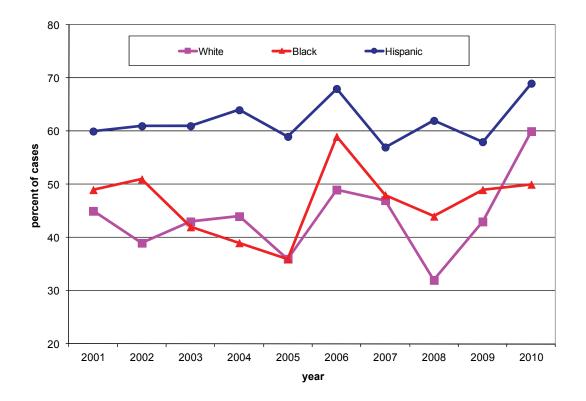


Figure 9: Percent of Cases Progressing to AIDS Within 1 Year of HIV Diagnosis by Race/Ethnicity, 2001-2011, San Diego County



<u>Table 17:</u> Community of Residence at AIDS Diagnosis, San Diego County

Community	Number	Percent
San Diego	10,710	72.3
Chula Vista	569	3.8
Oceanside	423	2.9
El Cajon	304	2.1
Escondido	299	2.0
Vista	251	1.7
San Ysidro	234	1.6
La Mesa	218	1.5
Spring Valley	216	1.5
National City	214	1.4
La Jolla	151	1.1
Carlsbad	148	1.0
Lemon Grove	113	0.8
Santee	108	0.7
Encinitas	100	0.7
Imperial Beach	99	0.7
San Marcos	90	0.6
Lakeside	56	0.4
Poway	55	0.4
Coronado	44	0.3
Fallbrook	42	0.3
Del Mar	41	0.3
Ramona	36	0.2
Bonita	34	0.2
Cardiff-by-the-Sea	24	0.2
Leucadia	20	0.1
Other*	140	1.0
Total	13,820	100.0

^{*}The following communites had fewer than 20 cases each: Alpine, Bonsall, Borrego Springs, Boulevard, Camp Pendleton, Campo, Descanso, Dulzura, Guatay, Jamul, Julian, Mount Laguna, Pauma Valley, Pine Valley, Ranchita, Rancho Santa Fe, San Luis Rey, Santa Ysabel, Solana Beach, and Valley Center.

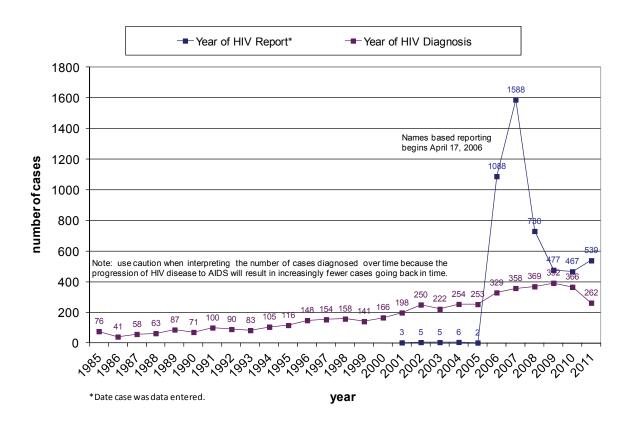
III. HIV CASES

<u>Table 18:</u>
Adult/Adolescent HIV Diagnoses by Gender and in the United States, the State of California, and San Diego County

	United S	States	California		San Diego County		San Diego County	
_	2007-2	2010	1985-June30, 2011		1985-2011		2009-2011	
Gender	#	%	#	%	#	%	#	%
Male	132,604	77%	37,464	87%	4,436	90%	934	90%
Female	39,172	23%	5,736	13%	474	10%	86	10%
Total	171,776		43,200**		4,910		1,020	

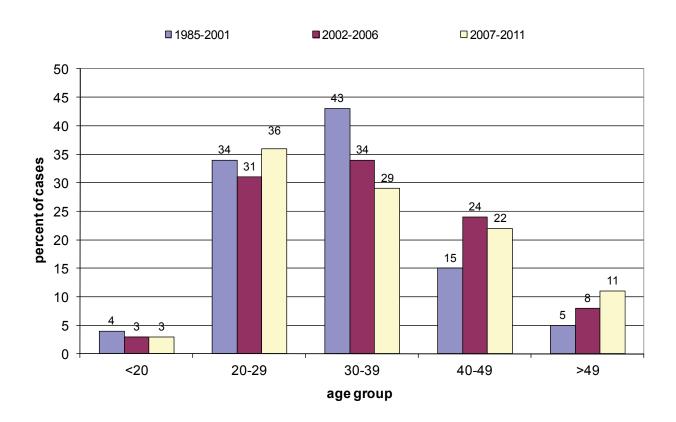
^{*}Most recent year available; estimate.

Figure 10: HIV Cases by Year of Report and Diagnosis, San Diego County



^{**}Does not include 298 transgendered persons and 3 of unknown gender.

<u>Figure 11:</u> HIV Cases by Age Group at Diagnosis, San Diego County

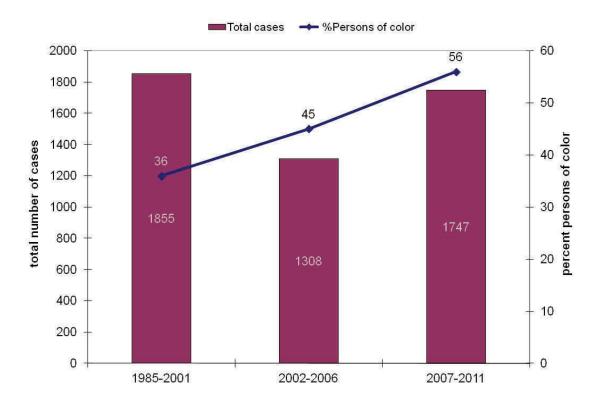


<u>**Table 19:**</u> Age of Cumulative HIV Cases at Diagnosis and in 2011, San Diego County

Age Group,	At Diagr	nosis	In 20	11*
Years	Frequency	Percent	Frequency	Percent
Less than 13	39	0.8%	17	0.4%
13-19	116	2.4%	25	0.5%
20-29	1,661	33.8%	607	12.8%
30-39	1,749	35.6%	1,167	24.5%
40-49	971	19.8%	1,621	34.1%
More than 49	374	7.6%	1,318	27.7%
Total	4,910	100.0%	4,755	100.0%

^{*}Of those living in 2011.

Figure 12: HIV Cases Diagnosed and Percent of Cases in Persons of Color by Time Period, San Diego County



<u>Table 20:</u> HIV Rates by Race/Ethnicity and Year of Diagnosis, San Diego County

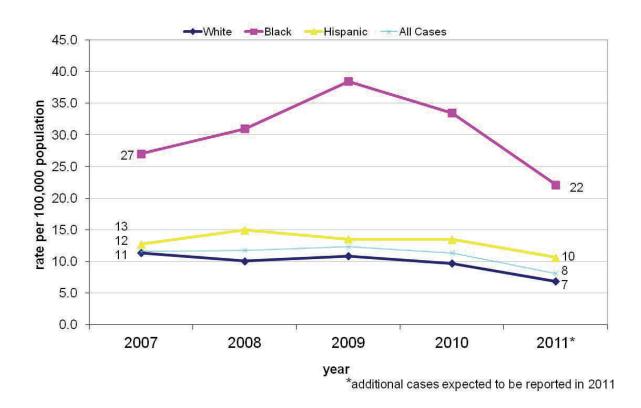
		Year of Diagnosis						
Race/ Ethnicit	Race/ Ethnicity		2008	2009	2010	2011**		
White	Cases	179	159	172	154	109		
	% of Total	50%	43%	44%	42%	42%		
	Rate*	11.4	10.0	10.8	9.7	6.9		
Black	Cases	44	51	64	56	37		
	% of Total	12%	14%	16%	15%	14%		
	Rate*	27.0	31.0	38.5	33.5	22.1		
Hispanic	Cases	116	140	130	133	105		
	% of Total	32%	38%	33%	36%	40%		
	Rate*	12.7	14.9	13.5	13.5	10.6		
All Races/	Cases	358	369	392	366	262		
Ethnicities#	Rate*	11.6	11.7	12.3	11.4	8.1		

^{*}per 100,000 population.

#Includes Asian, Pacific Islander, Native American, and others.

^{**}Additional cases diagnosed in 2011 are expected to be reported in 2012. 2010 population estimates were used to calculate 2011 rates as 2011 population estimates were not available.

Figure 13: HIV Rate by Race/Ethnicity Over Time, San Diego County



<u>Table 21:</u> HIV Cases by Age-Related Measures and Race/Ethnicity, San Diego County

	Age-Related		Race/Eth	nic Group		
Time Period	Measure	White	Black	Hispanic	Other*	All Cases
	mean age, years	34	32	30	30	33
1985-2001	oldest case	80	85	63	47	85
1903-2001	youngest case	<1 year	<1 year	<1 year	<1 year	<1 year
	total cases	1,190	234	372	59	1,855
	mean age, years	37	32	32	29	35
2002-2006	oldest case	76	71	71	47	76
2002-2000	youngest case	17	11	<1 year	18	<1 year
	total cases	720	153	391	44	1,308
	mean age, years	37	34	33	33	35
2007-2011	oldest case	73	68	79	59	79
2007-2011	youngest case	15	<1 year	<1 year	20	<1 year
	total cases	773	252	624	98	1,747
	mean age, years	36	33	32	31	34
Cumulative	oldest case	80	85	79	59	85
(1985-2011)	youngest case	<1 year	<1 year	<1 year	<1 year	<1 year
	total cases	2,683	639	1387	201	4,910
*Includes Asian, I	Pacific Islander, Native	Americans	, and Native	Alaskans.		

Includes Asian, Pacific Islander, Native Americans, and Native Alaskans.

<u>Table 22:</u> Female HIV Cases by Race/Ethnicity Over Time, San Diego County

	1985-	2001	2002-	2002-2006		2011	Cumu	Cumulative*	
Race/	%	total	%	total	%	total	%	total	
Ethnicity	female	cases	female	cases	female	cases	female	cases	
White	6%	74	5%	38	7%	55	5%	167	
Black	22%	51	24%	36	14%	35	16%	122	
Hispanic	16%	59	12%	47	10%	59	11%	165	
Other**	20%	12	5%	2	6%	6	14%	20	
Total	11%	196	9%	123	9%	155	8%	474	

Note: Percent of female cases refers to the percent of total cases, including male cases (not shown) in group who are female.

<u>Table 23:</u> HIV Cases by HHSA Region Over Time, San Diego County

			HHSA	Region				
Time Period of				North	North	North		Total in
Diagnosis	Central	East	South	Coastal	Inland	Central	Unknown	Time Period
1985-2001	61%	6%	10%	6%	4%	13%	<1%	1,855
2002-2006	58%	6%	13%	7%	4%	13%	<1%	1,308
2007-2011	51%	8%	17%	8%	4%	11%	<1%	1,747
Cumulative	57%	7%	13%	7%	4%	12%	<1%	
(1985-2011)	2,790	326	653	351	193	588	9	4,910
Note: Percentages	may not total	100 due	to roundin	g.			•	

<u>Table 24:</u>
Cumulative HIV Cases by HHSA Region and Race/Ethnicity, San Diego County

		HHSA Region							
				North	North	North		All	
Race/Ethnicity	Central	East	South	Coastal	Inland	Central	Unknown	Regions	
White	60%	56%	23%	56%	57%	68%	67%	55%	
Black	14%	17%	12%	11%	6%	11%	11%	13%	
Hispanic	22%	25%	61%	26%	32%	16%	<1%	28%	
Asian/PI	3%	2%	3%	5%	5%	5%	22%	3%	
Other*	1%	>1%	<1%	1%	2%	<1%	0%	<1%	
Total in Region	2,790	326	653	351	193	588	9	4,910	

^{*}Includes cases from 1981-2011.

^{**}Includes Asians, Pacific Islanders, Native American, Native Alaskan, and others.

^{*}Includes Asians, Pacific Islanders, Native American, Native Alaskan, and others.

<u>Table 25:</u> Female HIV Cases by Race/Ethnicity and HHSA Region Over Time, San Diego County

		Tim		_					
	1985	-2001	2002	-2006	2007	-2011	Cumulative		
	%	all	%	all	%	all	%	all	
HHSA Region	female	cases*	female	cases*	female	cases*	female	cases*	
Central	6%	1,135	7%	759	6%	896	7%	2,790	
East	23%	106	23%	80	23%	140	23%	326	
South	16%	185	13%	164	10%	304	13%	653	
North Coastal	20%	116	11%	91	13%	144	15%	351	
North Inland	20%	79	19%	47	15%	67	18%	193	
North Central	13%	232	7%	163	5%	193	9%	588	
Unknown	0%	2	0%	4	0%	3	0%	9	
Total	11%	1,855	10%	1,308	9%	1,747	10%	4,910	

^{*}Male and female

<u>Table 26:</u> HIV Cases by Race/Ethnicity and HHSA Region Over Time, San Diego County

	Time		Race/E	thnicity		Total in
HHSA Region	Period	White	Black	Hispanic	Other**	Time Period
Central	1985-2001	66%	14%	17%	3%	1,135
Central	2007-2011	49%	15%	30%	6%	896
	cumulative*	59%	14%	23%	4%	2,790
East	1985-2001	59%	15%	24%	3%	106
Lasi	2007-2011	50%	21%	25%	4%	140
	cumulative*	56%	17%	24%	3%	326
South	1985-2001	32%	10%	53%	5%	185
South	2007-2011	20%	14%	64%	2%	304
	cumulative*	23%	12%	62%	3%	653
North Coastal	1985-2001	69%	10%	17%	4%	116
North Coastai	2007-2011	45%	10%	37%	8%	144
	cumulative*	55%	11%	28%	6%	351
North Inland	1985-2001	71%	5%	22%	3%	79
North Illiand	2007-2011	45%	9%	34%	12%	67
	cumulative*	57%	6%	31%	6%	193
North Central	1985-2001	76%	10%	10%	4%	232
North Central	2007-2011	55%	12%	24%	8%	193
	cumulative*	68%	11%	16%	5%	588
Unknown	1985-2001	100%	0%	0%	0%	2
OHKHOWH	2007-2011	67%	0%	0%	33%	3
	cumulative*	67%	11%	0%	22%	9
	1985-2001	64%	13%	20%	3%	1,855
County-wide	2007-2011	44%	14%	36%	6%	1,747
1005.0011	cumulative	55%	13%	28%	4%	4,910

^{*1985-2011}

^{**}Includes Asian/Pacific Islander and Native American and other races/ethnicities.

Figure 14: Cumulative (n=4,418) and 2007-2011 (n=1,587) Male HIV Cases by Mode of Transmission, San Diego County

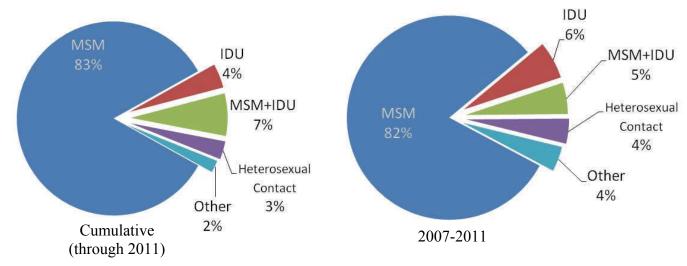
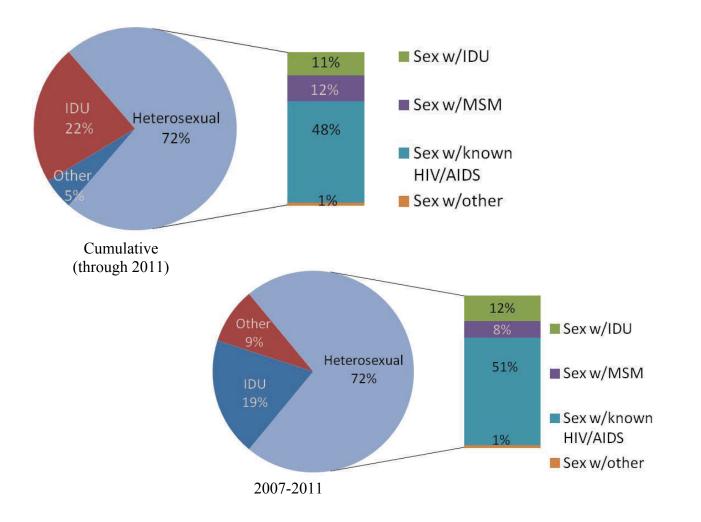


Figure 15: Cumulative (n=453) and Recent (n=154) Female HIV Cases by Modes of Transmission, San Diego County



<u>Table 27:</u> HIV Cases by Gender, Mode of Transmission, and Time, San Diego County

e		Time Pe	riod of Dia	agnosis	
Gender		1985-	2002-	2007-	
O	Mode of Transmission	2001	2006	2011	Cumulative*
	Adolescent/Adult:				_
	MSM	83%	85%	82%	83%
	IDU	3%	3%	6%	4%
	MSM+IDU	10%	8%	5%	7%
Male	Heterosexual	3%	3%	4%	3%
Σ̈́	Blood Products	<1%	<1%	<1%	<1%
	Risk not specified/other	<1%	1%	4%	2%
	Pediatric (0-12 years):				
	All modes	<1%	<1%	<1%	<1%
	Number in Group	1,659	1,185	1,592	4,436
	Adolescent/Adult:				
	IDU	22%	24%	19%	21%
d)	Heterosexual	67%	71%	72%	69%
Female	Blood products	1%	<1%	<1%	<1%
	Risk not specified/other	2%	2%	9%	4%
т.	Pediatric (0-12 years):				
	All modes	8%	3%	1%	4%
	Number in Group	196	123	155	474

^{*1985-2011}

<u>Table 28:</u> Adult/Adolescent Male HIV Cases by Mode of Transmission and Race/Ethnicity, and Time San Diego County

		F		All Racial/				
	W	White		Black		Hispanic		Groups*
	2002-	2007-	2002-	2007-	2002-	2007-	2002-	2007-
Mode of Transmission	2006	2011	2006	2011	2006	2011	2006	2011
MSM	87%	85%	74%	70%	85%	84%	85%	82%
IDU	3%	6%	5%	9%	4%	4%	3%	6%
MSM+IDU	8%	6%	10%	4%	6%	3%	8%	5%
Heterosexual	1%	1%	9%	11%	4%	5%	3%	4%
Blood products	0%	0%	0%	0%	0%	0%	0%	0%
Not specified/Other	<1%	3%	3%	7%	2%	4%	1%	4%
Number in Group	682	718	117	213	339	564	1,180	1,587

^{*}Includes Asian, Pacific Islander, Native American and Native Alaskan.

<u>Table 29:</u> Adult/Adolescent Female HIV Cases by Mode of Transmission and Race/Ethnicity, and Time, San Diego County

				All Racial/				
	White		Bl	Black		panic	Ethnic Groups*	
	2002-	2007-	2002-	2007-	2002-	2007-	2002-	2007-
Mode of Transmission	2006	2011	2006	2011	2006	2011	2006	2011
IDU	40%	27%	20%	9%	16%	16%	24%	19%
Heterosexual	58%	67%	77%	74%	82%	78%	73%	72%
Blood products	0%	0%	0%	0%	0%	0%	0%	0%
Not specified/Other	3%	6%	3%	17%	2%	7%	3%	9%
Number in Group	38	55	35	35	44	58	119	154

^{*}Includes Asian, Pacific Islander, Native American, and Native Alaskan.

<u>Table 30:</u> Hispanic HIV Cases by Gender, Place of Birth, and Time, San Diego County

e		Time F	Period of D	iagnosis	
Gender		1985-	2002-	2007-	_
Ğ	Place of Birth	2001	2006	2011	Cumulative*
	US born	49%	49%	55%	51%
υ	US dependency born	1%	1%	1%	1%
Male	Foreign born	49%	49%	44%	47%
_	Unknown	1%	1%	1%	1%
	Number in time period	313	344	565	1,222
	US born	41%	30%	42%	38%
<u>e</u>	US dependency born	3%	0%	0%	1%
Female	Foreign born	56%	68%	58%	60%
F	Unknown	0%	2%	0%	1%
	Number in time period	59	47	59	165

^{*}Includes cases from 1985-2011.

<u>Table 31:</u>
Community of Residence at HIV Diagnosis, San Diego County

Community	Number	Percent
San Diego	3,644	74.2
Chula Vista	224	4.6
Oceanside	133	2.7
El Cajon	101	2.1
Escondido	84	1.7
San Ysidro	83	1.7
National City	76	1.5
Vista	73	1.5
La Mesa	73	1.5
Carlsbad	60	1.2
Spring Valley	47	1.0
La Jolla	37	0.8
Santee	37	0.8
Imperial Beach	33	0.7
Lemon Grove	32	0.7
Encinitas	21	0.4
San Marcos	21	0.4
Other*	131	2.7
Total	4,910	100.0

^{*}The following communites had fewer than 20 cases each: Alpine, Bonita, Bonsall, Borrego Springs, Boulevard, Camp Pendleton, Campo, Cardiff-by-the-Sea, Coronado, Del Mar, Descanso, Dulzura, Fallbrook, Guatay, Jamul, Julian, Lakeside, Mount Laguna, Pala, Pauma Valley, Pine Valley, Poway, Ramona, Ranchita, Rancho Santa Fe, San Luis Rey, Santa Ysabel, Solana Beach, Valley Center, Warner Springs.

IV. DATA SOURCES

County of San Diego, HIV/AIDS Epidemiology Unit

HIV/AIDS Surveillance Report, 2009 (Vol 21). Centers for Disease Control and Prevention HIV/AIDS Surveillance in California, 2010. California Department of Public Health, Office of AIDS

SANDAG Population Estimates

Additional information may be found at:

www.sdhivaids.org

www2.sdcounty.ca.gov/hhsa/documentsPhysiciansBulletinDecember2008.pd

IV. APPENDICES

Appendix 1. Glossary

Adult/Adolescent Cases—HIV and AIDS cases who were at least 13 years of age at time of diagnosis.

Case Fatality Rate—The number of deaths due to a disease within a specified time period divided by the number with that disease in the same time period, multiplied by 100.

Incidence — The total number of new cases of a disease occurring within a specified period of time.

Incidence Rate—The number of cases of a disease per specified time period divided by the population at risk, often expressed per 100,000. Incidence rates are useful for comparison of selected factors to demonstrate severity of the epidemic among different ages, gender, and racial/ethnic groups.

Living Cases—Those cases for which no notification of death has occurred; cases are assumed to be alive until shown to be deceased.

Mode of Transmission—The way in which a communicable disease is passed from one person to another. In describing HIV/AIDS cases it identifies how an individual may have been exposed to HIV, such as having injected drugs, or homosexual or heterosexual contact.

Pediatric Cases — HIV and AIDS cases who were under the age of 13 years at the time of diagnosis

Prevalence—The number of all living cases (old and new) of a given disease within a specified time period.

Prevalence Rate—The number of all living cases (new and old) of a given disease within a specified time period divided by the population at risk, often expressed per 100,000. Prevalence rates are useful for comparison of selected factors to demonstrate the severity of the epidemic among individuals of different ages, gender, and racial/ethnic groups.

Probability-The likelihood of an event (e.g., two variables being related to each other).

Significant—Meaningful. In statistics, this refers to a result that produces a p-value result below some set value (generally 0.05) indicating an outcome/event is unlikely to be due to chance.

Statistics—The science, art, and technique of collecting, summarizing, analyzing, and interpreting numerical information that is subject to chance or systematic variations. Biostatistics is the sub-discipline dealing with biological systems, such as humans.

Surveillance—The systematic and ongoing collection, collation, and analysis of health-related information that is used to identify health problems and trends.

Glossary-continued

Year of Diagnosis—The year in which an individual met the CDC case definition for HIV or AIDS.

Year of Report—The year in which an HIV/AIDS case is reported to Health and Human Services Agency, Epidemiology Program of the Epidemiology and Immunization Services Branch.

Appendix 2. HIV/AIDS Reporting—Reliability and Limitations

Individuals with HIV or AIDS are required to be reported to the HHSA pursuant to California Code of Regulations, Health & Safety Statutes, Title 17, Section 2643.5 and 2500. Reports come from physicians, hospitals, clinics, and other health care providers, via HIV/AIDS Case Report forms. A San Diego County case is an individual diagnosed with HIV or AIDS, while residing in San Diego County.

Active verification of cases and internal tests of the data increase the reliability of the data.

The HIV and AIDS case data used to generate reports may have several limitations as listed below:

- 1. Under-reporting of cases HIV and AIDS cases for which notification to the Epidemiology and Immunization Services Branch is delayed results in "under-reporting." It is likely that cases diagnosed in 2010 will continue to be reported in 2011.
- 2. Diagnosis date versus report date. Reporting delays impact the available data. Those cases diagnosed in 2011, for example, may not have been reported to the Health and Human Services Agency until 2012 or later. See Appendix 1, Glossary for Year of Diagnosis and Year of Report.
- **3.** Collection tools While information on a variety of variables is collected, the data collected is limited and reflects the quality of data submitted by the reporting facility. Data on income or specific drug of choice is not collected, for example.
- **4.** *Non-resident cases* Persons with HIV or AIDS diagnosed while resident outside of the county are not represented in data for the county in this report.
- 5. Asian/Other category Asian/Pacific Islander and Native American racial/ethnic groups are sometimes grouped into one category, Asian/Other, to allow for adequate case numbers for analysis.
- 6. Confidentiality Charts and graphics with small cell sizes (under 5) may not be described in detail where identification of persons may occur.
- 7. Limited time collecting data. Name-based reporting of HIV infection without an AIDS defining condition was authorized under SB 699, and signed into law by the Governor on April 17. 2006. HIV data may be skewed to primarily represent the patients who have remained in care at those facilities that have been able to more easily adopt to this revision of HIV reporting.

Appendix 3. Reporting HIV and AIDS Cases for Health Care Providers

Who is responsible for reporting HIV and AIDS cases?

Every health care provider knowing of or in attendance on a case or suspected case of HIV or AIDS is required to make a report. (California Code of Regulations, Health & Safety Statutes, Title 17, Section 2643.5 and Section 2500).

When is HIV Reported?

A case is reported when a patient has a test result indicative of HIV infection. This includes:

- Confirmed positive HIV antibody test
- Any viral load test
- P24 antigen test
- Viral isolation test
- Nucleic Acid test (NAAT)

Providers should report an individual newly positive for HIV, as well as those the health care provider (ordering the test) has never reported and has no verification that the individual has already been reported. If an individual meets the case definition for AIDS, they are reported again including the AIDS-defining condition.

The provider should report a case even if the patient may have been reported by another provider. This helps ensure complete case capture, which is critical for local prevention and treatment funding. Health care providers are required to complete a report within 7 days of learning of the HIV test.

When is AIDS Reported?

When an individual is diagnosed with one or more of the AIDS defining conditions listed below, his or her health care provider is required to report the case to the local health department within seven (7) days of the diagnosis (for HIV infected individuals, definitive or presumptive):

- CD4+ T-lymphocyte count <200mL/mm³ or N14% of total T-lymphocytes
- Candidiasis of the bronchi, trachea, or lungs
- Candidiasis, esophageal
- Cervical cancer, invasive
- Coccidioidomycosis, disseminated or extrapulmonary
- Cryptococcosis, extra-pulmonary
- Cryptosporidiosis, chronic intestinal
- Cytomegalovirus disease
- Cytomegalovirus retinitis
- Encephalopathy, HIV-related
- Herpes simplex: chronic ulcers or bronctis, pneumonitis or esophagitis
- Histoplasmosis, disseminated or extrapulmonary
- Isosporiasis, chronic intestinal
- Kaposi's Sarcoma
- Lymphoma, Burkitt's
- Lymphoma, immunoblastic
- Lymphoma, primary in the brain
- Mycobacterium avium complex or M kansasii, disseminated or extrapulmonary
- Mycobacterium tuberculosis, any site
- Pneumocystis carinii pneumonia
- Pneumonia, recurrent
- Progressive multifocal leukoencephalopathy
- Salmonella septicemia, recurrent
- Toxoplasmosis of the brain
- Wasting syndrome due to HIV

The pediatric AIDS case definition (those under 13 years of age) includes all of the above indicator diseases except pulmonary Mycobacterium tuberculosis, cervical cancer and CD4+ T-lymphocyte counts <200 mL/mm³ or <14% of total T-lymphocytes. In addition, recurrent bacterial infections (at least two episodes within a two year period) and lymphoid interstitial pneumonia/pulmonary lymphoid hyperplasia (LIP/PHL) are AIDS defining conditions for HIV infected children.

The original case definition of AIDS was established by the Centers for Disease Control and Prevention (CDC) in 1981. Additional conditions and diseases were added in 1985, 1987,

and 1993. All case definitions and revisions have been published in the CDC publication entitled 'Morbidity and Mortality Weekly Report' (MMWR).

Recent changes in California Reporting Law (SB 1184)include a provision for reporting of all CD4+ counts to facilitate the identification of all AIDS cases in a more timely manner.

What information is required to be reported?

Reports of HIV and AIDS cases to the local health department shall minimally include: name, address, telephone number, full social security number, racial/ethnic group, gender, date of birth, mode of transmission information, diagnosis (HIV or AIDS), and date of diagnosis. In addition, name, address, and phone number of the person or facility making the report should be provided.

The Epidemiology Program specifically, and the County in general, is required by law to protect the privacy of any individual reported with HIV or AIDS.

How should a report be made?

Providers can submit a confidential case report form available from County of San Diego, Health and Human Services Agency. Forms can be sent to:

Michael Bursaw, MPH
Epidemiology Program
Epidemiology & Immunization Services Branch
Health and Human Services Agency
3851 Roscrans Street, MS P577
San Diego, CA 92110
(619) 692-8414

Providers also have the option of reporting cases by phone. For a reporting kit or any additional information, call the Epidemiology Program at (619) 692-8461, or visit:

www.sdhivaids.org.

Why is reporting necessary?

The law requires reporting of diagnosed HIV and AIDS cases. California's disease reporting regulations specify what, when, where, and how to report cases.

Timely and accurate HIV/AIDS case reports provide this county with a better understanding of the local epidemic. Epidemiologists can monitor trends in populations being affected by HIV infection, project future numbers of AIDS cases, and provide information to those responsible for planning for future health care needs and prevention activities.

Failure to report in a timely manner may have an impact on current and projected funding needs. Funding formulas using data which represents under-reporting of HIV or AIDS cases may translate into under funded programs and services for those with HIV disease.

A summary of legislation related to the case reporting, confidentiality, and surveillance activities supported in the California Code of Regulations is available by calling the Epidemiology Program at (619)692-8461. For a copy of the regulations and more information on HIV/AIDS reporting go to:

www.dhs.ca.gov/AIDS

Additional information about reporting and HIV/AIDS in San Diego County may be found at:

http://www2.sdcounty.ca.gov/hhsa/documents/ PhysiciansBulletinDecember2008.pdf

Appendix 4. Computing Rates, Rates by Racial/Ethnic Groups and Statistics.

Rates provide a better indication of the burden of disease for a given population than absolute numbers of cases. A rate allows populations with dissimilar sizes to be compared. Rates may be based on the population at large (for AIDS rates) or a subpopulation utilizing services (clients presenting for HIV Counseling and Testing [HCT] for HCT rates) or individuals in a research study (sexually transmitted disease [STD] seroprevalence study).

Rate Calculation

A rate is calculated by dividing the number of individuals with a disease/condition in a given time period by the population size and multiplied by 100,000:

For example, in the year 2001, there were 434 individuals diagnosed with AIDS. When the number of cases (434) is divided by the population size (2,868,873) and multiplied by 100,000, the resulting rate is:

Rates by racial/ethnic groups are computed by dividing the number of individuals with AIDS from a particular racial/ethnic group by the number of that same racial/ethnic group in the population at large. For example, in 2005 there were 204 AIDS cases in whites and 46 cases in blacks. This represented 50% (white) and 11% (blacks) respectively of all cases diagnosed that year. Based only on the absolute numbers (204 and 46) or the percentages (50% and 11%), it would appear that the greater issue is in whites. Using rates allows us to compare the relative burden of disease on each group by taking into account the population size. In 2005, there were 1,574,617 whites and 161,033 African Americans residing in the County. If the population sizes are taken into account and use the calculation above, the AIDS case rate per 100,000 population is 13 for whites and 29 for African Americans. So, the burden of disease is much higher for African Americans than for whites.

Rates for many diseases are presented as "per 100,000 population" as shown above. This is done, by convention, to make the calculated number easier to use. Some rates may use other multipliers for the population. For example, infant mortality rate is calculated per 1,000 live births.

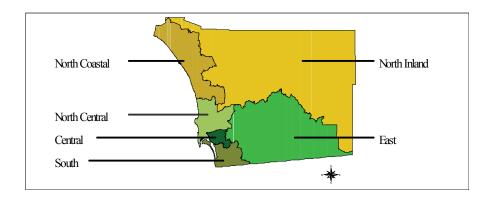
In San Diego County, the rates are generally calculated using population estimates calculated by the San Diego Association of Governments (SANDAG). Because the US Census is only done every ten years, and the population of San Diego County is very dynamic, these SANDAG estimates allow for more up to date rates for comparison. SANDAG does revise estimates over time, as new information becomes available, so it should be remembered that small differences in rates may be seen, even over the same time period.

Fluctuation in rates occurs over time and between groups. The smaller the number of events (i.e., cases), the greater the fluctuation. Statistical tests are often used to determine when one rate is different from another. When rates are described here 'statistically significant' or 'significant', the rates can be said to be different from each other with 95% confidence (p<.05).

Appendix 5. Health and Human Services Agency (HHSA) Regions of San Diego

San Diego County is divided into six Health and Human Services Agency regions by zip code. The following list presents the regions and the zip codes contained therein.

Figure 16: HHSA Regions of San Diego County



Central Area

Zip codes 92101, 92102, 92103, 92104, 92105, 92113, 92114, 92115, 92116, 92132, 92134, 92136, 92139, 92112, 92162, 92163, 92164, 92165, 92170, 92175, 92176, 92186, 92191, 92194, 92186, 92191, 92194, 92199, 92152, 92158, 92181, 92187, 92191, 92194, and 92195.

East Area

Zip codes 91901, 91905, 91906, 91916, 91917, 91931, 91934, 91935, 91941, 91942, 91945, 91948, 91962, 91963, 91977, 91978, 91980, 92019, 92020, 92021, 92040, 92071, 91944, 92090, 91946, and 92090.

South

Zip codes 91902, 91910, 91911, 91913, 91914, 91915, 91932, 91950, 92010, 92011, 92118, 91921, 91990, 92135, 92154, 92155, 92173, 92179, 91909, 91912, 92143, 91951, 91933, 92073, 92050, 92153, 92158, 91921, and 91990.

North Coastal

Zip codes 92007,92008,92009,92013, 92014, 92024, 92051, 92052, 92054, 92055, 92056, 92057, 92067, 92013, 92058, 92068,92075, 92077, 92081, 92083, 92084, 92672, 92092, 92093, 92169, 92161, 92038, 92137, 92078, 92091, 92199, 92096, 92013, 92078, 92091, 92077, 92081, 92088, 92058, and 92096.

North Inland

Zip codes 92003, 92004, 92025, 92026, 92027, 92028, 92029, 92036, 92059, 92060, 92061, 92064, 92065, 92066, 92069, 92070, 92082, 92086, 92127, 92128, 92129, 92259, 92390, 92536, 92592, 92046, 92198, 92190, and 92079.

North Central

Zip codes 92037, 92106, 92107, 92108, 92109, 92110, 92111, 92117, 92119, 92120, 92121, 92122, 92123, 92124, 92126, 92130, 92131, 92133, 92140, 92142, 92145, 92138, 92147, 92166, 92168, 92171, 92172, 91990, 92193, 92196, 92177, and 92147.

HIV/AIDS Epidemiology

Epidemiology & Immunization Services Branch 3851 Rosecrans St, MS P577 San Diego CA 92110

